EU says growth hormones pose health risk

Rory Watson, *Brussels*

Scientific research commissioned by the European Union has concluded that six growth hormones used for growth promotion in cattle pose a risk to consumers. The adverse consequences include developmental, neurobiological, genetoxic, and carcinogenic effects.

The findings are being used by the European Union to support its 11 year ban on imports of beef from cattle treated with hormones. The embargo applies to such beef from around the world but is being most vigorously challenged by the United States and Canada. The Geneva based World Trade Organisation recently ruled against the EU ban. Despite the judgment, the EU is determined to keep the ban and is considering offering compensation instead.

The independent scientists who carried out the research, whose results have been passed to the United States and Canada, concluded that there was substantial evidence to consider the natural hormone 17β-oestradiol as a complete carcinogen which could cause tumours. A statement by the European Commission noted that even small residues of this hormone carried an inherent risk of causing cancer and that the data available did not allow a quantitative estimate of the risk.

For the other five hormones—progesterone, testosterone, zeranol, trenbolone, and inelengestrol—the scientists considered the information currently available inadequate for a quantitative assessment. At the same time, they insisted that it was not possible to establish threshold levels for any of the six growth promoters. They did warn, however, that of the various risk groups, prepubertal children were at risk greatest. □

TONY TALBOT/AP PHOTO

Research suggests that growth hormones in cattle pose a health risk

US drug trials expand outside academic centres

Fred Charatan, *Florida*

Since the emergence of managed care in the United States in 1990, clinical trials of new drugs have shifted from researchers working in university hospitals and medical schools to individual doctors with little experience in clinical research.

The growth of drug testing can be seen in the numbers of doctors who participate. In 1990, 4307 doctors conducted research studies, but in 1997, 11 662 doctors conducted studies. While the number of academic and medical school researchers doubled, from 2225 to 4431, their "market share" dropped from one third to a quarter of the total. This has led to real competition between academia, medical schools, and private doctors for the lucrative research dollar.

The *New York Times*, which carried out a 10 month study of the drug testing industry, recently reported a story about Dr Robert Fiddes, who is currently serving a 15 month sentence. Dr Fiddes was convicted of a gigantic drug testing fraud since 1987, involving fictitious patients, fabricated data, substituted body fluids, and bogus paperwork, until a former study coordinator blew the whistle.

Dr Sidney Wolfe, director of Public Citizen's Health Research Group, a non-profit watchdog agency in Washington, DC, said that the larger issue was the increased competition between drug companies in getting their products approved. This had led to the emergence of the testing companies making a profit from human experimentation. Private doctors were easy prey as recruiters of their own patients for clinical trials, in return for what Dr Wolfe called "legal bribes."

Dr Arthur Caplan, director of the centre for bioethics at the University of Pennsylvania, said that the explosive growth of money given to researchers led to cutting corners on patients' eligibility for the trials and to a huge conflict of interest. He said that fiscal lures and incentive systems were "out of control" and predicted congressional hearings into human experimentation and clinical trials.

Driven by competition, seeking to speed clinical trials, and encouraged by the Food and Drug Administration's (FDA) faster approval process for new drugs, drug companies have been offering doctors cash bonuses for each patient enrolled in clinical trials of new products. And doctors, with incomes squeezed by payment cutbacks in Medicare, Medicaid, and private insurers, have been responding. For example, in 1996, a study of a migraine drug by Janssen Pharmaceutica of Johnson and Johnson paid doctors $3600 (£2250) for each patient enrolled.

"There are doctors who can net about $500 000 to $1m a year doing clinical research," said Ismail A Shalaby, the chief executive of Nema Research Incorporated, a network of doctors and hospitals performing clinical research around Baltimore, Maryland.

Patients are ignorant of the cash incentive offered to their doctor to recruit them. Informed consent forms, which patients must sign, say nothing about cash payments. Professor Uwe Reinhardt, a healthcare economist at Princeton University, who himself agreed to take part in a clinical trial run by his doctor, said: "The doctor has enormous power over you. You want to keep his favour. If you say no, you'll worry that he may not like you."

And cash payments are not the only incentive offered to doctors by drug companies. The doctor who successfully enrols patients may be given the right to claim authorship of published papers about the studies, even though the papers may be written by a ghostwriter using the drug company's analysis.

Besides the switch from academic researchers to private doctors, the drug companies have helped to create a new industry of drug testing. These new contract research organisations design the studies, find the doctors and patients, analyse the data, meet with the FDA, write the scientific papers, and prepare the final applications for approval of the new drug by the FDA.

Overseeing of all this drug testing and development appears to be weak. The drug testing companies employ study monitors to review the test results, but their function is to protect the integrity of the data, not the experimental subjects. Institutional review boards of hospitals, academic institutions, and medical schools protect patients and research subjects, but many have difficulty in keeping up with the volume of testing. □